Records of Hawaiian Dermaptera and Orthoptera of the Family Gryllidae.

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(Presented by E. H. Bryan, Jr., at the meeting of December 3, 1925.)

Material, secured subsequent to our studies in Hawaiian Dermaptera and Orthoptera, has recently been received from the Bernice Pauahi Bishop Museum. One species previously unknown from the Islands is represented, as well as several of the scarcer forms, in the series of 114 specimens here recorded.

DERMAPTERA.

LABIDURIDAE.

PSALINAE.

Anisolabis eteronoma (Borelli).

Waiohinu, Kau, Hawaii, VIII, 4, 1923 (W. H. Meinecke), 1 & 2 9. Honaunau, Hawaii, VI, 22, 1922 (J. F. Illingworth), 1 & .

Anisolabis perkinsi Burr.

Kauai, 2000 to 4000 feet, III, 1919 (J. A. Kusche), 1 &, 3 \, 2 juv. \, 2 juv. \, \, 2 Olokele Canyon, Kauai, II, 1919 (J. A. Kusche), 1 \, 2 Kaholuamano, Kauai, IV, 1920 (J. A. Kusche), 1 \, 8 .

Euborellia annulipes (Lucas).

Kilauea, Hawaii, VIII. 22 (B. Clarke), 1 9. Hawi, Hawaii, VI, 22, 1922 (M. C. Neal; near shore), 1 5. Hilo, Hawaii, VI. 22, 1922 (J. F. Illingworth), 1 juv. 9. Moanalua, Oahu, IV. 9. 1922 (E. H. Bryan, Jr.), 2 9. Honolulu, Oahu, IX, 1923, 1 juv. Waianae Mountains, Oahu (J. F. Illingworth), 3 9. Mount Tantalus, Oahu, IX, 7, 1923 (S. C. Ball), 1 9. Nuuahu, Oahu, VIII, 27 and IX, 15, 1922 (S. Bickerton), 1 5, 1 9. Waialae Beach, Oahu, X, 16, 1922 (J. F. Illingworth), 1 9. Kalihi, Oahu,

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VIII, 18, 1923 (O. E. Cheatam), 1 9. Wawamalu Beach, near Koko Crater, Oahu, XII, 17, 1922 (E. H. Bryan, Jr.), 1 5, 2 9. Koko Head, Oahu, XII, 10, 1922 (J. F. Illingworth), 3 5, 2 9. Kailua, Maui, VI, 19, 1920 (E. H. Bryan, Jr.), 1 9. Keanae, Maui, VII, 4, 1920 (E. H. Bryan, Jr.), 2 9. Kokee, Kauai, I, 1919 (J. A. Kusche), 2 9. Kauai, 2000 to 4000 feet, II and III, 1919 (J. A. Kusche), 2 8, 3 9, 1 juv. 9.

LABIIDAE.

LABIINAE.

Sphingolabis hawaiiensis (Bormans).

Hilo, Hawaii, VI, 22, 1922 (J. F. Illingworth), 2 &, 1 \, 2. Moanalua, Oahu, IV, 9, 1922 (O. H. Swezey), 2 \&. Waialae Iki, Oahu, III, 21, 1920 (E. H. Bryan, Jr.), 1 \, 2. Honolulu, Oahu (J. F. Illingworth), 1 \, 2. Honopu, Kauai, VI, 20, 1922 (E. H. Bryan, Jr.; from a dead goat), 1 \&, 1 \, 2.

Labia pilicornis (Motschulsky).

Kealakekua, Hawaii, VIII, 12, 1919 (O. H. Swezey), 1 9.

Labia dubronyi Hebard.

Kuliouou, Oahu, XII, 22, 1918 (O. H. Swezey), 1 \(\frac{9}{2} \). Palolo, Oahu, II, 26, 1922 (O. H. Swezey; from rotten Charpentiera), 1 \(\frac{9}{2} \). Makaleha, north slopes Mount Kaala, Oahu, I, 8, 1922 (O. H. Swezey), 1 \(\frac{5}{6} \). Kaumuahona, Oahu, XI, 17, 1918 (O. H. Swezey), 3 \(\frac{9}{2} \). Olokele Canyon, Kauai, II, 1919 (J. A. Kusche), 1 \(\frac{5}{6} \). Halehaku, Maui, VI, 16, 1920 (E. H. Bryan, Jr.), 1 \(\frac{5}{6} \).

CHELISOCHIDAE.

CHELISOCHINAE.

Chelisoches morio (Fabricius).

Honolulu, Oahu, VI, 1919 (J. F. G. Stokes), 1 &, 1 \(\text{2}. \)
Kalihi Pali, Oahu, IX, 18, 1921 (E. H. Bryan, Jr.), 1 juv.
Sacred Falls, Oahu, I, 22, 1922 (E. H. Bryan, Jr.), 1 \(\text{2}. \)
Moanalua, Oahu, X, 21, 1922 (E. H. Bryan, Jr.), 1 \(\text{2}, 3 \)
juv.

ORTHOPTERA.

GRYLLIDAE.

TRIGONIDIINAE.

Paratrigonidium gracile Perkins.

South Kona, Hawaii, VIII, 8, 1919 (O. H. Swezey), 1 8, 1 9.

Paratrigonidium varians Perkins.

South Kona, Hawaii, VIII, 8, 1919 (O. H. Swezey), 1 \(\text{?.} \) Makaleha, north slopes Mount Kaala, Oahu, I, 8, 1922 (O. H. Swezey), 1 \(\text{?.} \) Mount Olympus, Oahu (O. H. Swezey), 1 \(\text{?.} \), 2 \(\text{?.} \) Kaumuahona, Oahu, XI, 23, 1919 (O. H. Swezey), 2 \(\text{?.} \) Halehaku, Maui, VI, 16 and 24, 1920 (E. H. Bryan, Jr.), 1 \(\text{?.} \), 1 \(\text{?.} \) Wailuanui, Maui, VII, 2, 1920 (E. H. Bryan, Jr.), 1 \(\text{?.} \).

Paratrigonidium saltator Perkins.

Lanihuli, Oahu, V, 25, 1918 and XI, 24, 1919 (O. H. Swezey), 1 ô, 1 9. Waialae Iki, Oahu, III, 21, 1920 (O. H. Swezey), 1 o

Paratrigonidium pacificum (Scudder).

South Kona, Hawaii, VIII, 8, 1919 (O. H. Swezey), 3 \, Judd Trail, Hawaii, VIII, 14, 1919 (O. H. Swezey), 1 \, Mount Kaala, western side, Oahu, VI, 1, 1918 (O. H. Swezey), 1 \, Lao Valley, Maui, VIII, 8, 1918 (O. H. Swezey), 2 \, \, \

ENEOPTERINAE.

Prognathogryllus robustus Perkins.

Kaholuamano, Kauai, IV, 1920 (J. A. Kusche), 2 .

Prognathogryllus alatus Brunner.

Kuliouou, Oahu, XII, 22, 1918 (O. H. Swezey), 1 juv. 8. 1 juv. 2.

Prognathogryllus oahuensis Perkins.

Lanihuli, Oahu, XI, 24, 1918 (O. H. Swezey), 1 2. Kailua, Maui, VI, 18, 1920 (E. H. Bryan, Jr.; from dead twig of Coprosma), 1 5.

We are satisfied that of the four species described by Perkins ¹ but two are valid. Examination of the types is, however, necessary to determine whether the synonyms are referable to *alatus* or to the insect we have recognized as *oahuensis*.²

Mount Kaala, Oahu, II, 18, 1923 (O. H. Swezey; on Gunnera), 2 &. Mount Konahuanui, Oahu, II, 23, 1919 (O. H. Swezey), 1 &. Kaholuamano, Kauai, IV, 1920 (J. A. Kusche), 1 \(\text{?} \). Kaiwiki, Hawaii, IX, 12, 1918 (O. H. Swezey), 2 \(\text{?} \). 1 \(\text{?} \).

Leptogryllus nigrolineatus Perkins.

Waialae Iki, Oahu, XII, 17, 1922 (W. H. Meinecke), 1 \(\text{?} \). Kaumuahona, Oahu, XI, 17, 1918 (O. H. Swezey), 1 \(\text{?} \). Manoa Valley, Oahu, X, 15, 1919 (E. H. Bryan, Jr.), 2 \(\text{?} \).

The eleven specimens of *Leptogryllus* here recorded further strengthen our belief that only a few variable species can be recognized, rather than many forms, as Perkins supposed.

MYRMECOPHILINAE.

Myrmecophila americana Saussure.

1877. Myrmecophilus americanus Saussure, Mel. Orth., Fasc. V, p. 461. [\, \text{, Colombia.}]

Honolulu, Oahu, Bishop Museum Building, I, 17, 1924 (O. H. Swezey and E. H. Bryan, Jr.), 1 &, 3 9. The ant host of this series is *Prenolopis longicornis* Latr.

This minute dark species, with a broad whitish transverse bar on the mesonotum, was originally described from Colombia. Later it has been reported from Pará, Brazil, and from Bombay, Khandala and Wallon, India.³ The Asiatic series were described as *M. prenolepidis* by Wasmann, a name which has been synony-

¹ Fauna Hawaiiensis, II, p. 25 (1899).

² Occasional Papers, B. P. Bishop Museum, VII, p. 368 (1922).

³ Schimmer, Zeitschr. für Wissensch. Zool., XCIII, p. 427 (1909).

mized by Schimmer. Some of the North African forms of this genus which have been described are extremely close, indicating the possibility of further synonymy.

This is the first Hawaiian record for the present minute but widespread myrmecophilous cricket.